

Thematic Group meeting Resource Efficient Rural Economy

International and EU policy context surrounding soil and water resource efficiency

Background document

Bologna, Italy, 3rd – 5th May, 2017

International policy context



Aim:

- Overview of how **soil and water resource efficiency** has been approached at international level and supported through SDGs



The importance of improving the efficient use of resources is recognised at the global scale explicitly by the United Nations in the 17 sustainable development goals (SDGs) that form the 2030 agenda for sustainable development (UN, 2015).

The Sustainable Development Goals seek to realize the human rights of all. They are integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental.

The Goals and targets will stimulate action over the next fifteen years in areas of critical importance for humanity and the planet.

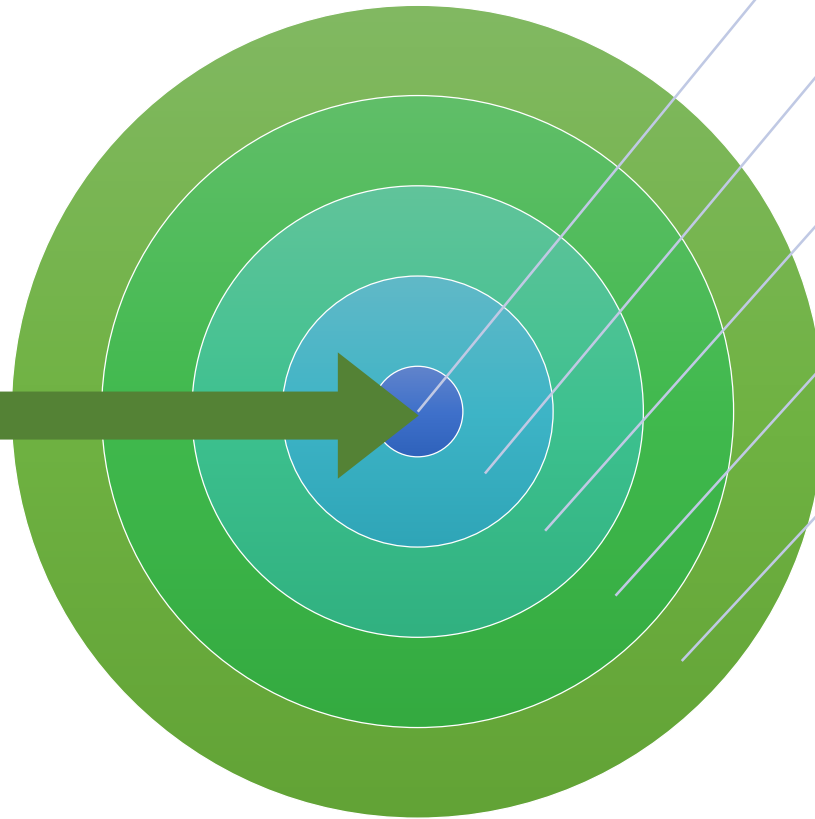
Our Governments have the primary responsibility for follow-up and review, at the national, regional and global levels,

SUSTAINABLE DEVELOPMENT GOALS



2030 Agenda – Focusing in on Change

Moving from
goals through to
delivery and
change in
environmental
conditions by
2030



Implementation –

Regional and National decision making and delivery;
Voluntary International monitoring

SDG Indicators – 1 or more per target

169 SDG Targets – date, change to be seen

17 Sustainable Development Goals

2030 Agenda

SDGs – Targeting Resource Efficiency in Soil and Water Management

Rural Management and Resource Efficiency

Most Relevant SDG Targets

2
ZERO HUNGER



2.4 - By 2030, ensure **sustainable food production systems** and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation and that progressively improve land and soil quality

8
DECENT WORK AND ECONOMIC GROWTH



8.4 - Improve progressively, through 2030, **global resource efficiency in consumption and production** and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead

12
RESPONSIBLE CONSUMPTION AND PRODUCTION



12.2 - By 2030, achieve the **sustainable management and efficient use of natural resources**

15
LIFE ON LAND



15.1 - By 2020, ensure the **conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services**, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

15.9 - By 2020, **integrate ecosystem and biodiversity values** into national and local planning, development processes, poverty reduction strategies and accounts

SDGs – Resource efficiency in Soil and Water Management

Water Availability

Specific SDG Targets of Note for Water Management

3 GOOD HEALTH AND WELL-BEING



3.9 - By 2030, substantially **reduce the number of deaths and illnesses from hazardous chemicals** and air, water and soil pollution and contamination

6.3 - By 2030, **improve water quality** by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

6 CLEAN WATER AND SANITATION



6.4 - By 2030, substantially **increase water-use efficiency** across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

6.5 - By 2030, implement **integrated water resources management at all levels**, including through transboundary cooperation as appropriate

6.6 - By 2030, **protect and restore water-related ecosystems**, including mountains, forests, wetlands, rivers, aquifers and lakes

SDGs – Resource efficiency in Soil and Water Management

Soil and Nutrients and Soil Carbon

Specific SDG Targets Relevant to Soil Resource Management

15.3 - By 2030, combat desertification, **restore degraded land and soil**, including land affected by desertification, drought and floods, and strive to **achieve a land degradation-neutral world**

Specific SDG Targets Relevant to Soil and Nutrients

6.3 - By 2030, **improve water quality** by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

Specific SDG Targets Relevant to Soil Carbon

13.1 - Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all Countries

13.2 - Integrate climate change measures into national policies, strategies and planning

15

LIFE ON LAND



6

CLEAN WATER AND SANITATION



13

CLIMATE ACTION



Implementation – Annual Cycle of Focus and Review by the UN

2017 - Eradicating poverty and promoting prosperity in a changing world

High Level Political Forum on Sustainable Development, New York – 10 to 19 July

Includes review of **SDG 2 and 3** relevant to all aspects of resource efficiency in the rural economy

2018 - Transformation towards sustainable and resilient societies

To consider SDGs including:

- SDG 6 relevant to resource efficient use of water and in pollution terms soil and nutrients;
- SDG 12 relevant to sustainable consumption and production including all aspects of resource efficiency in the rural economy
- SDG 15 relevant to the resource efficient management of land and fresh water in the rural economy and specifically soil degradation

2019 - Empowering people and ensuring inclusiveness and equality

To consider SDGs including:

- SDG 8 intended to improve global resource efficiency relevant to all aspects of the rural economy
- SDG 13 relevant to soil carbon in terms of delivering resilient soils and mitigating emissions from soils

Reviewing Implementation

Voluntary National Reviews -

<https://sustainabledevelopment.un.org/vnrs/>

Synthesis report by theme annually – 2016 –

https://sustainabledevelopment.un.org/content/documents/127761701030E_2016_VNR_Synthesis_Report_ver3.pdf

Dedicated High Level Review Groups –

High Level Panel on Water – dedicated to delivering SDG 6 relating to water resources –

<https://sustainabledevelopment.un.org/HLPWater>

On 21 September 2016 the HLPW called for a **fundamental shift in the way the world looks at water** and launched their action plan on water –

https://sustainabledevelopment.un.org/content/documents/11280HLPW_Action_Plan_DEF_11-1.pdf

Parallel Discussions –

Development of the concept of **land degradation neutrality** – key to the implementation of soil actions within the SDG, developing in parallel under the **UNCCD; COP 13** – 4 to 15 September 2017

Discussions on the role of soil carbon within the UNFCCC – role of agriculture and soils – Paris

FAO – World Soil Charter; Voluntary Guidelines for Soil Management -
<http://www.fao.org/documents/card/en/c/0549ec19-2d49-4cfb-9b96-bfbbc7cc40bc/>

EU policy context



Aim:

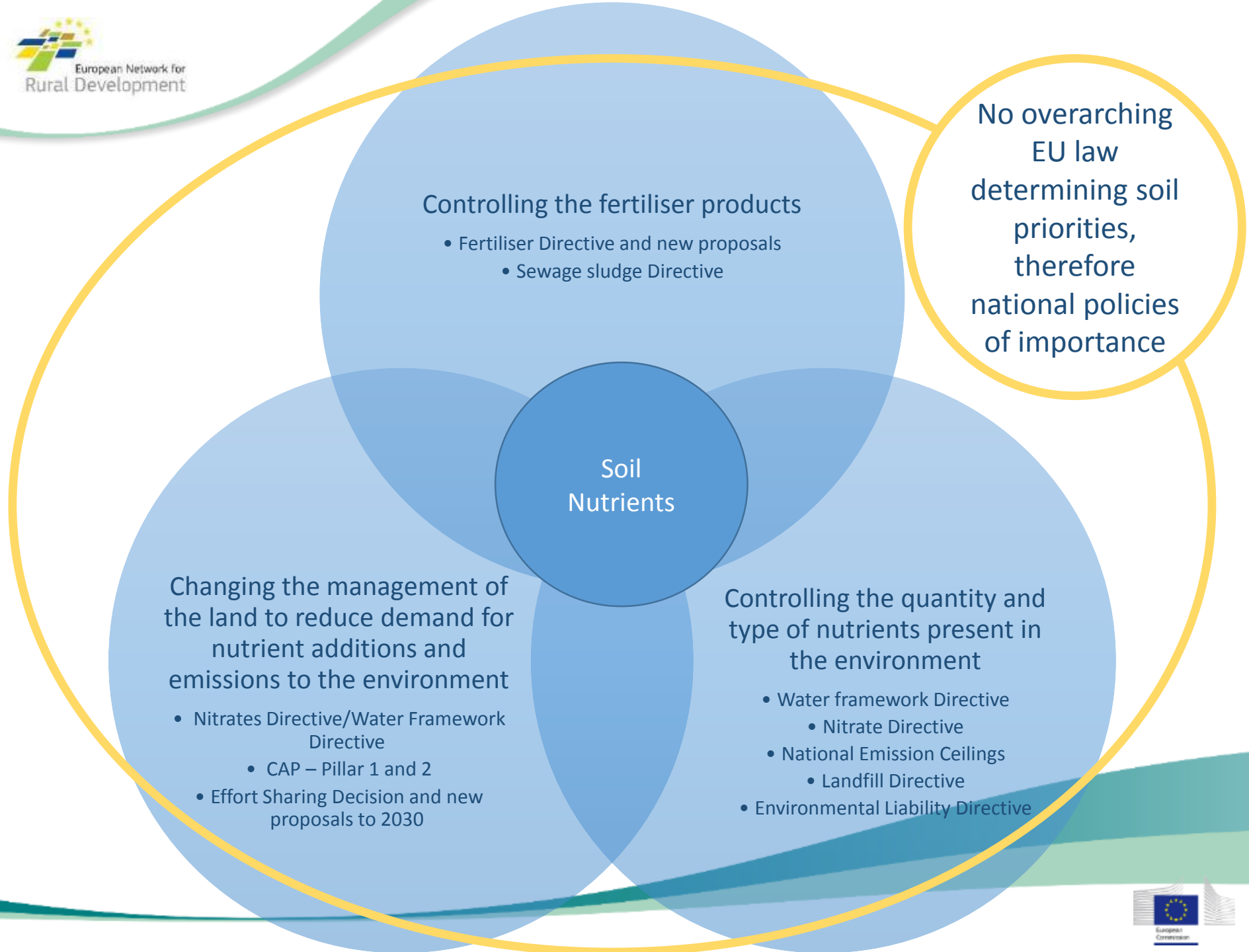
- Overview of how **soil and water resource efficiency** has been approached at EU level and supported through EAFRD through the **RDPs**

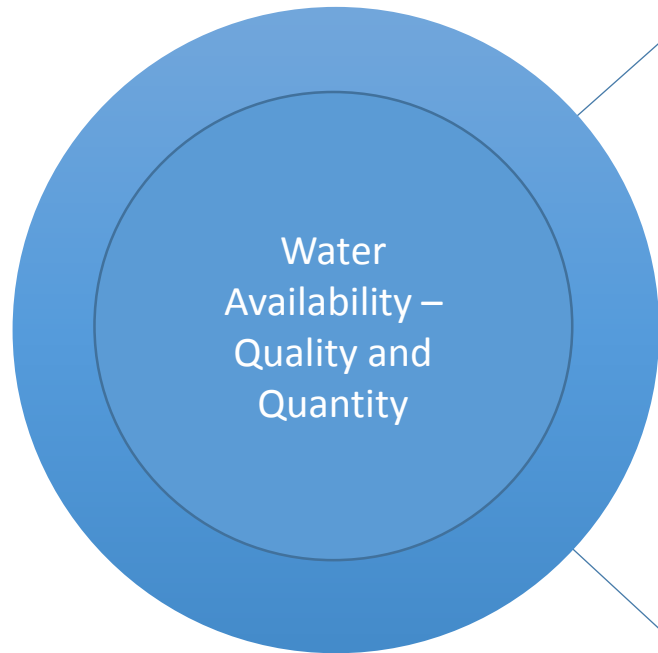
Content:

- How RDPs deal with resource efficiency of soils and water in terms of content, focus and programming

Sources:

- (limited) secondary literature on RDP implementation choices





Driving improved
holistic water
management at a
river catchment
level

- Water Framework Directive

Driving changes in
practice to support
achievement of
good
environmental
status – primarily
water quality

- CAP – Pillar 1 and 2
- Water Framework Daughter Directives eg Nitrates Directive; Drinking Water Directive; Groundwater Directive
- Environmental Liability Directive
- Industrial Emissions Directive

Controlling the
development and
management of
water
quantity/flows

- Floods Directive
- Environmental Impact Assessment Directive

Limiting Carbon emissions from land use and management

- LULUCF Decision and new proposals to 2030
- CAP – Pillar 1 and 2

No overarching EU law determining soil priorities, therefore national policies of importance

Soil Carbon Conservation and Sequestration

Patterns of nutrient management and promoting alternative mechanisms for soil management

- Water Framework Directive and Daughter Directives
- Effort Sharing Decision
- CAP – Pillar 1 and 2

Promoting monitoring of soil condition

- GHG accounting linked LULUCF and ESD
- Data gathering activities including LUCAS

Resource efficiency in RDP programming

Soil nutrients

Focus Areas 4B and 4C

- No breakdown allocation available per FA

Targets:

- Northern EU MS, the UK, EE and AT set targets beyond EU average
- PT, IT, GR, PL, SK, SI and LV between 20 and 30%
- FR, DE and Benelux below EU average

Expenditure:

- BG, PL, AT and RO smaller shares
- CZ, AT and N-W EU MS allocate 2/3 of their budget

Water availability

Focus Areas 4B

- 96% of RDPs

Target:

- 15.1% of agricultural land
- 4.2% of forest land

Focus Area 5A

- Less 50% of RDPs selected 5A

Target:

- 15.3% of EU irrigated land
- IT, DE, PL, PT CY beyond 10%
- ES, AT, HU between 5% and 10%
- UK, FR and GR less than 5%

Soil carbon

Focus Area 5E

- 80% of RDPs

Target:

- 2% of agricultural and forest land
- EE, UK, MT and BE between 15% and 5%
- Most EU MS between 1% and 5%, with PL, GR, BU, CZ and SK beyond 1%

Expenditure:

- PT largest budget for 5E
- Most EU MS allocated between 6 and 2%

Resource efficiency in RDP programming: measures mix

Priority 4:

- Most MS activated a mix including M10, M13, M11
- Coupled with M8 and M4
- 1% spent on M16, M1 and M2

Focus Area 5A:

- 95% of spending is on M4
- 2% on M16, while 1% each went to M1 and M2
- All MS (except HU) have activated a mix of M4, M1 and M2
- Estonia supports only M2, while CY significant use of M10

Focus Area 5E:

- More than 70% allocated to M8
- Approx. 20% to M10 and M13
- 3% to M4, 1% to M1 and M2
- BE, IE, CZ, HU, LV, PL and RO selected almost only M8
- Most MS used a mix of M8, M16, M10, M2 and M1
- DE, FR, GR and the UK used M4



Resource efficiency in RDP implementation*

Soil and nutrients

- **Agri-environment-climatic measures (M10)** most relevant to support sustainable agricultural practices (BG, FI, Brittany - FR)
- In some instances, M10 is **coupled with non-productive investments (M4.4)** (BG, Emilia-Romagna - IT, FI and Brittany – FR)
- **Investments in physical assets (M4)** also relevant to enhance soil nutrients (BG, Extremadura – ES and Brittany – FR)
- **Organic farming (M11)** used to reduce chemical inputs to land to improve water quality
- **Knowledge transfer (M1) and advice (M2)** (Extremadura – ES, NL, SI, North-Rhine Westphalia – DE, Scotland – UK)

Water availability

- **Investments in physical assets (M4)** especially in relation to water saving irrigation systems (BG, Emilia-Romagna – IT, Extremadura, ES) or to improve water use and reduce pollution in the food and drink industry (DE)
- BG, Emilia-Romagna – IT and Extremadura – ES use M4 to ensure more efficient use of water, while DE uses them to support improve storage of silage, slurry or manure, or to reduce ammonia
- In the NL, **M4.4 are used to complement agri-environment-climatic schemes (M10)** – BG, Emilia-Romagna – IT, FI and Brittany – FR
- **Agri-environment-climatic schemes (M10)** are both relevant to water availability and soil management. Few MS (SI and PL) explicitly reference M10 to address RBMPs

Soil carbon

- No compiled information is available on the implementation choices in RDPs to address specific soil carbon needs
- **Investments in forestry (M8)** appear to play an important role in addressing soil carbon (70% of EU-28 public expenditure allocated to M8 under FA 5E)
- **Agri-environment-climatic schemes (M10)** relevant to soil carbon, especially in Emilia-Romagna – IT and PL

*CAP evaluation (2016) included analysis on a cluster of MS – BU, Extremadura (ES), North-Rhine Westphalia (DE), FI, Brittany (FR), Emilia-Romagna (IT), NL, PL, SI and the UK.